

AMENDMENTS TO THE CLAIMS

Claims pending

- At time of the Action: Claims 47-58 and 63-66.
- After this Response: Claims 47-58 and 63-66.

Currently Amended Claims: Claims 47, 48, 56, 63, and 64.

47. (Currently Amended) An electrostatic imaging process comprising:

(A) forming a ~~[[charging]]~~ charged ~~[[a]]~~ latent electrostatic image on a photoconductive surface; and

(B) applying to the photoconductive surface toner particles from a liquid toner ~~at least first and second liquid toners~~, thereby forming an image of ~~at least two~~ colors, wherein the ~~first and second liquid toners comprise differently colored pigments and wherein each of the first and the second liquid toners~~ toner comprises:

(a) an insulating non-polar carrier liquid;

(b) at least one charge director; and

(c) toner particles dispersed in the carrier liquid and the at least one charge director, the particles comprising:

(i) a core material comprising a pigmented polymer suitable for use as a toner material in an electrostatic image development application, ~~but~~ which is unchargeable by the at least one charge director or which is

weakly chargeable by the at least one charge director ~~to less than or equal to 103 pmho/cm; [[and]]~~

(ii) a coating of at least one ionomer component in an amount effective to impart enhanced chargeability to the toner particles to an extent that the particles can be used to develop a latent electrostatic image in the electrostatic image development application;

(iii) wherein the coating of the at least one ionomer added to the toner particles in ~~each of the a~~ first and a second liquid toner ~~toners~~ is sufficient to result in ~~similar the same~~ chargeability for toner particles within the first and second liquid toner ~~toners~~; and

(iv) wherein the coating of the at least one ionomer increases the chargeability of the toner particles to less than or equal to 103 pmho/cm.

48. (Currently Amended) The electrostatic imaging process of Claim 47, wherein ~~the core material a coated toner particle~~ a coated toner particle is chargeable by the at least one charge director to less than or equal to 86 pmho/cm.

49. (Previously Presented) The electrostatic imaging process of Claim 47, wherein the core material is chargeable by the at least one charge director to less than or equal to 7 pmho/cm.

50. (Previously Presented) The electrostatic imaging process of Claim 47 wherein the at least one ionomer is carboxylic acid based and neutralized with metal salts forming ionic clusters.
51. (Previously Presented) The electrostatic imaging process of Claim 47 wherein the at least one ionomer is carboxylic acid based and neutralized with metal salts forming ionic clusters.
52. (Previously Presented) The electrostatic imaging process of Claim 47 wherein the at least one ionomer is methacrylic acid based and neutralized with metal salts forming ionic clusters.
53. (Previously Presented) The electrostatic imaging process of Claim 47 wherein the at least one ionomer is sulfonic acid based and neutralized with metal salts forming ionic clusters.
54. (Previously Presented) The electrostatic imaging process of Claim 47 wherein the at least one ionomer is phosphoric acid based and neutralized with metal salts forming ionic clusters.
55. (Previously Presented) The electrostatic imaging process of Claim 47 wherein the at least one ionomer is ethylene based and neutralized with metal salts forming ionic clusters.

56. (Currently Amended) The electrostatic imaging process of Claim 47 wherein the ~~coating~~ coating comprises less than 20 percent of the weight of the particles.
57. (Previously Presented) The electrostatic imaging process of Claim 47 wherein the coating comprises a thickness greater than or equal to a monolayer of the at least one ionomer.
58. (Previously Presented) The electrostatic imaging process of Claim 47 wherein the coating comprises a thickness of greater than 0.02 micrometers.
59. (Previously Withdrawn) An electrostatic imaging system, comprising:
- (A) a photo conductive surface configured to allow charging to define a latent electrostatic image thereon; and
 - (B) toner particles from at least first and second liquid toners, applied to the photoconductive surface to form an image of at least two colors, wherein the first and second liquid toners comprise differently colored pigments and wherein each of the first and the second liquid toners comprises:
 - (a) an insulating non-polar carrier liquid;
 - (b) at least one charge director; and
 - (c) toner particles dispersed in the carrier liquid and the at least one charge director, the particles comprising:

(i) a core material comprising a pigmented polymer suitable for use as a toner material in an electrostatic image development application, but which is unchargeable by the at least one charge director or which is chargeable by the at least one charge director to less than or equal to 103 pmho/cm; and

(ii) a coating of at least one ionomer component in an amount effective to impart enhanced chargeability to the toner particles to an extent that:

(a) the particles can be used to develop a latent electrostatic image in the electrostatic image development application; and

(b) the polarity of the toner particles is reversed;

(iii) wherein the coating of the at least one ionomer added to toner particles in each of the first and second liquid toners is sufficient to result in similar chargeability for toner particles within the first and second liquid colors.

60. (Previously Withdrawn) The electrostatic imaging system of Claim 59, wherein the core material is chargeable by the at least one charge director to less than or equal to 86 pmho/cm.

61. (Previously Withdrawn) The electrostatic imaging system of Claim 59, wherein the core material is chargeable by the at least one charge director to less than or equal to 7 pmho/cm.
62. (Previously Withdrawn) The electrostatic imaging system of Claim 59, wherein imparting enhanced chargeability comprises enhancing the chargeability of the core material with the coating by an order of magnitude over chargeability of the core material without the coating.
63. (Currently Amended) Liquid toners for electrostatic imaging, comprising:
- (A) at least first and second liquid toners of first and second colors, wherein the first and the second liquid toners are configured with pigmented polymers having differently colored pigments and wherein each of the first and the second liquid toners comprises:
- (a) an insulating non-polar carrier liquid;
 - (b) at least one charge director; and
 - (c) toner particles dispersed in the carrier liquid and the at least one charge director, the particles comprising:
 - (i) a core material comprising a pigmented polymer suitable for use as a toner material in an electrostatic image development application, ~~but~~ which is unchargeable by the at least one charge director or which is weakly chargeable by the

at least one charge director to ~~less than or equal to~~ 103
pmho/cm; [[and]]

(ii) a coating of at least one ionomer component in an amount effective to impart enhanced chargeability to the toner particles to an extent that the particles can be used to develop a latent electrostatic image in the electrostatic image development application;

(iii) wherein the coating of the at least one ionomer added to toner particles in each of the first and the second liquid toners is sufficient to result in similar chargeability for toner particles within the first and the second liquid toners; and

(iv) wherein the coating of the at least one ionomer increases the chargeability of the toner particle less than or equal to 103 pmho/cm.

64. (Currently Amended) The liquid toners of Claim 63, wherein the ~~core~~
material coated toner particle is chargeable by the at least one charge director to less than or equal to 86 pmho/cm.

65. (Previously Presented) The liquid toners of Claim 63, wherein imparting enhanced chargeability comprises enhancing the chargeability of the core

material with the coating by an order of magnitude over chargeability of the core material without the coating.

66. (Previously Presented) The liquid toners of Claim 63, wherein the coating is used in an amount effective to reverse a polarity imparted on the toner particle by the charge director.